In the Claims:

Please amend claims 23-25, 29-31, 35 and 36 (clam amendments are shown with ~~strikethrough~~ for deleted matter and underline for added matter).

Please cancel claims 26-28, 32-34 and 37-44.

Please add new claims 45-47.

A complete listing of the claims with proper claim identifiers is set forth below.

1-22. (Canceled)

23. (Currently amended) A method of ~~modulating physiological and pathophysiological conditions mediated by androgens in a mammal~~ mediating androgen hormone action so as to ameliorate at least one condition of the prostate in a subject, comprising ~~the step of~~

administering ~~to the mammal an effective amount of an enantiomeric~~ equol, at least 1% of which is R-equol, ~~that can~~ wherein R-equol binds with free 5α-dihydrotestosterone, thereby inhibiting the binding of 5α-dihydrotestosterone with the androgen receptors ~~in the mammal and mediating the conditions mediated by the androgen~~.

24. (Currently amended) The method ~~according to~~ of claim 23, wherein the ~~physiological and pathophysiological conditions is selected from the group consisting of:~~ condition of the prostate is benign prostatic hyperplasia~~,~~ or prostate cancer~~, male and female pattern baldness, facial and body hair, acne, excessive secretion of sebum from the sebaceous glands, skin effects, anti-aging, anti-photoaging, skin integrity, skin pigmentation, skin whitening, Alzheimer's disease, emotions and mental health, depression, anxiety, Tourette's disease, Kennedy's syndrome, congenital defects in steroidal hormone synthesis and metabolism~~

~~involving androgens, obesity, body weight, lipid and cholesterol levels, lipogenesis, lipolysis, inhibiting insulin resistance, blood pressure, thyroid function, and cardiovascular disease~~.

25. (Currently amended) The method ~~according to~~ of claim 23, wherein the equol is administered as an oral composition comprising at least 1 mg ~~enantiomeric~~ equol.

26-28. (Cancelled)

29. (Currently amended) The method ~~according to~~ of claim 23, wherein the equol is ~~administered as a composition comprising a non-racemic~~ a racemic mixture of R-equol and S-equol ~~enantiomers~~.

30. (Currently amended) A method of ~~treating and preventing an androgen-related disease in a mammal~~ ameliorating at least one condition of the prostate in a subject, comprising ~~the step of~~

administering ~~to the mammal an effective amount of an enantiomeric~~ equol, at least 1% of which is R-equol, wherein R-equol ~~that can~~ binds with free 5α-dihydrotestosterone, thereby inhibiting the binding of the 5α-dihydrotestosterone ~~with the androgen receptors in the mammal~~.

31. (Currently amended) The method ~~according to~~ of claim 30, wherein the ~~androgen-related disease~~ condition of the prostate is ~~selected from the group consisting of:~~ benign prostatic hyperplasia, or prostate cancer~~, male and female pattern baldness, facial and body hair, acne, excessive secretion of sebum from the sebaceous glands, skin effects, anti-aging, anti-photoaging, skin integrity, skin pigmentation, Alzheimer's disease, abnormal emotions and mental health, depression, anxiety, Tourette's disease, Kennedy's syndrome, congenital defects in steroidal hormone synthesis and metabolism involving androgens, obesity,~~

~~body weight, abnormal lipid and cholesterol levels, excessive lipogenesis, lipolysis, inhibiting insulin resistance, high blood pressure, thyroid function, and cardiovascular disease~~.

32-34. (Cancelled)

35. (Currently amended) The method ~~according to~~ of claim 30, wherein the equol is administered as an oral composition comprising at least 1 mg ~~enantiomeric~~ equol.

36. (Currently amended) The method ~~according to~~ of claim 30, wherein the equol is a racemic mixture of S-equol and R-equol ~~is administered as a topical composition comprising at least 0.1% enantiomeric equol.~~

37-44. (Cancelled)

45. (New) A method of mediating androgen hormone action so as to ameliorate benign prostatic hyperplasia in a subject, comprising administering equol in an amount sufficient to bind with free 5α-dihydrotestosterone, thereby inhibiting the binding of 5α-dihydrotestosterone with the androgen receptors.

46. (New) A method of co-mediating androgen hormone actions and estrogen hormone action so as to ameliorate benign prostatic hyperplasia in a subject, comprising administering equol in an amount sufficient to bind with free 5α-dihydrotestosterone, thereby inhibiting the binding of the 5α-dihydrotestosterone with the androgen receptors, and an amount sufficient to bind estrogen receptor subtypes.

47. (New) A pharmaceutical composition for ameliorating benign prostatic hyperplasia in a subject comprising

equol in an amount sufficient to bind with free 5α-dihydrotestosterone, thereby inhibiting the binding of 5α-dihydrotestosterone with the androgen receptors; and

at least one of a pharmaceutically acceptable carrier, adjuvant, or excipient.

CLAIM STATUS

Claims 1-20 were previously cancelled. Claims 26-28, 32-34 and 37-44 are presently cancelled.

Claims 23-25, 29-31, 35 and 36 are amended.

Support for amendment to claims 23 and 30 may be found throughout the specification including, e.g., at page 13, paragraphs 93 and 94 continuing at page 14, and at page 14 continuing at page 15, paragraph 97, where ratios of S-equol to R-equol are listed. Specifically, the limitation "equol, at least 1% of which is R-equol" is supported by ratio of S-equol to R-equol of 99:1.

Amendments to claims 24, 25, 29, 31, 35 and 36 relate to form and/or grammar only for the purpose of increasing the clarity of the claims.

New claims 45-47 are added. Support for new claims 45 and 46 may be found throughout the specification including, for example, paragraphs 87, 88, 93, 128, and Example 1. Support for new claim 47 may be found throughout the specification including, for example, paragraphs 93 and 96.

Claims 23-25, 29-31, 35, 36 and 45-47 are pending.